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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,399

03/22/2004

Hubert Caron

4590-219

9837

22429

7590

01/20/2006

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EXAMINER

VU, MINDY D

ART UNIT

PAPER NUMBER

2884

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/805,399

Applicant(s)

CARON ET AL.

Examiner

Mindy Vu

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 17-20 is/are rejected.
- 7) ☒ Claim(s) 13-16 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

This Office Action is in response to the Applicant's application filed March 22, 2004.

#### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The information disclosure statement (IDS) submitted on June 7, 2004 identified as discussion has been considered.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandell et al. (5,757,004, hereafter Sandell).

With respect to Claim 1, Sandell discloses a system having a variable field of regard (Col. 1 lines 8-10, for example Fig. 2), comprising: a housing 10 having a lens

assembly 14; a movable sensor assembly located within the housing (Col. 1 lines 58-61); a radiation detector 12 connected to the sensor assembly; and an actuator 21 connected to the housing 10 and able to move the sensor assembly in the housing 10 and thereby move the radiation detector 12 in an image plane relative to the optical axis of the lens assembly.

Sandell discloses a radiation detector 12 connected near to the end of the sensor assembly but lacks a detector 12 connected to one end of the sensor assembly. However, this is just a designer's choice of where to assemble the detector in the housing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify a radiation detector connected to one end of the sensor assembly in view of assembly purposes.

With respect to Claim 2, Sandell discloses the radiation detector is an infrared detector (Col. 1 lines 8-10).

With respect to Claim 3, Sandell discloses the actuator contacts one end of the sensor assembly (Fig. 3 & Col. 3 lines 25-27).

With respect to Claim 4, Sandell discloses the sensor assembly further comprises a flange 16 on an outer portion of the sensor assembly for contact with motion of the actuator.

With respect to Claim 5, Sandell discloses a spring 22 connected to the housing for exerting force against one end of the sensor assembly.

With respect to Claim 6, Sandell discloses the system further comprising: a projection rails 18 (Fig. 2) connected to the housing and interfit with the sensor assembly to prevent rotation of the sensor assembly in the housing.

With respect to Claim 7, Sandell discloses a portion of the sensor assembly interfits with the housing projection (Col. 3 lines 45-64).

With respect to Claim 8, Sandell discloses the actuator remains in contact with the sensor assembly as a result of the spring exerting force against the sensor assembly (Fig. 3 & Col. 3 lines 45-64).

With respect to Claim 9, Sandell discloses the sensor assembly is vertically movable within the housing (Fig. 4B).

With respect to Claim 10, Sandell discloses the lens assembly is connected at one end of the housing and positioned such that a radiation sensitive area of the detector is alignable within an image plane of the lens assembly (Figs. 4A-C).

With respect to Claim 11, Sandell discloses the actuator is movable to contact the sensor assembly and move the sensor assembly in a vertical direction thereby moving the detector in a vertical direction within an image plane of the lens assembly (Fig. 3).

With respect to Claim 12, Sandell discloses the actuator is not in contact with the sensor assembly (Col. 3 lines 45-64).

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wrobel et al. (6,563,102, hereafter Wrobel) in view of Sandell et al. (5,757,004, hereafter Sandell).

With respect to Claim 17, Wrobel discloses a method for controlling the field of view of a vision system (Abstract), comprising the sensor module 11 is elevated when the handle 33 is pushed forward based on the aid of a friction mechanism 53 for elevational adjustment along a horizontal plane about the vertical axis (Col. 5 lines 19-46).

Wrobel controls the field of view by tilting (Fig. 6) but relies on friction to hold the adjustment. Wrobel lacks the step of moving a radiation detector in a vertical direction within an image plane of the driver vision enhancing system. Sandell discloses a motion detector for establishing the range and field of view having a means of providing relative movement of the sensor in vertical direction with respect to the lens without moving the sensor head overall (Col. 1 lines 56-61 & Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the sensor module of Wrobel with the detector-moving mechanism of Sandell for the rugged adjustment (Col. 4 lines 2-13) in view of improvement in field of view.

With respect to Claim 18, Wrobel discloses the radiation detector is connected to a sensor tube assembly and Sandell suggests the moving step further comprises: moving an actuator to contact a sensor tube assembly causing the sensor tube

assembly to move in a vertical direction and thereby move the radiation detector (Col. 3 lines 45-64).

With respect to Claim 19, Sandell discloses the actuator-moving step further comprises: compressing a spring biasing the sensor tube assembly in a vertical direction (Col. 3 lines 53-64).

With respect to Claim 20, Sandell discloses motion of the actuator in contact with the sensor tube assembly compresses the spring (Col. 3 lines 45-64).

### ***Allowable Subject Matter***

Claims 13-16 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or suggest the actuator is one of a pneumatic, fluid pressure, and electromagnetic type actuator; the sensor assembly is a vertically oriented cylinder or a cylindrical-shaped; the actuator is vertically moving the sensor tube assembly along the housing projection without allowing rotation of the sensor tube assembly.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mindy Vu whose telephone number is 571-272-8539. The examiner can normally be reached on M-F 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mv

  
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